

### **REMARKS**

Claims 1, 4, 8, 11-13, 18, 22, 29 and 35 are currently pending in the subject application and are presently under consideration. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

#### **I. Rejection of Claims 1, 4, 8, 11-13, 18, 22, 29 and 35 Under 35 U.S.C. §101**

Claims 1, 4, 8, 11-13, 18, 22, 29 and 35 stand rejected under 35 U.S.C. §101 as allegedly being directed towards non-statutory subject matter. Withdrawal of this rejection is requested for at least the following reasons. The subject claims produce a useful, concrete, and tangible result, and therefore are directed towards statutory subject matter.

Because the claimed process applies the Boolean principle [abstract idea] to produce a *useful, concrete, tangible result* ... on its face the claimed process comfortably falls within the scope of §101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999) (Emphasis added); See *State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998). The inquiry into patentability requires an examination of the contested claims to see if the claimed subject matter, as a whole, is a disembodied mathematical concept representing nothing more than a "law of nature" or an "abstract idea," or if the mathematical concept *has been reduced to some practical application rendering it "useful."* *AT&T* at 1357 citing *In re Alappat*, 33 F.3d 1526, 31 1544, 31 U.S.P.Q.2D (BNA) 1545, 1557 (Fed. Cir. 1994) (Emphasis added) (holding that more than an abstract idea was claimed because the claimed invention as a whole was directed toward forming a specific machine that produced the useful, concrete, and tangible result of a smooth waveform display).

Independent claim 1 (and similarly independent claims 22, 29 and 35) recites a *system stored on computer readable media, comprising: an input component that reads a meta-model to determine a structure of an item, the meta-model comprising at least one meta-relationship and at least one meta-class, the at least one meta-relationship describing one or more relationships between meta-classes and the at least one meta-class being a class encapsulating data employed to represent another class*. Accordingly, the subject claims yield a useful, concrete and tangible result relating to supporting meta-data manipulations and interactions. (See Specification pg. 4,

ln. 1-3). In particular, the claimed subject can provide a meta-model object to support a higher-level abstraction for data classes than is provided by conventional object models. Therefore, the claimed subject matter can enable developers to describe attributes, relationships, and respective constraints for meta-data that simplifies program development and operating system interactions and thus significantly reduces the cost of development and increases the quality of software design tools and editors. (See Specification pg. 5, ln. 21-23). This is clearly a useful, concrete and tangible result.

Moreover, the subject independent claims recite *determining the structure of an item according to a meta-model or a meta-relationship*. Determining the structure of an item is a useful, concrete, and tangible result because the computer readable medium can be updated with the structure of an item. For example, one of the many useful aspects about determining the structure of an item is that it allows the Model Data Cache Manager to determine which data needs to be updated in memory at any given time and load or unload data to match those needs. (See Specification pg. 13, ln. 16-18 and Fig. 2, item 230).

Accordingly, it is respectfully submitted that claims 1, 4, 8, 11-13, 18, 22, 29 and 35, as previously presented, fall squarely within the purview of *AT&T Corp. Excel Communications, Inc.* Thus, claims 1, 4, 8, 11-13, 18, 22, 29 and 35 are eligible for patenting under 35 U.S.C. §101 and the rejection of these particular claims is errant. It is respectfully requested that this rejection be withdrawn.

## **II. Rejection of Claims 1, 4, 8, 11-13, 18, 22, 29 and 35 Under 35 U.S.C. §102(b)**

Claims 1, 4, 8, 11-13, 18, 22, 29 and 35 stand rejected under 35 U.S.C. §102(b) as being anticipated by Template Software as described in “Using the SNAP Development Environment” (hereinafter referred to as “SNAP”), “Developing a WFT Workflow System” (hereinafter referred to as “WFT”) and “Using the WFT Development Environment” (hereinafter referred to as “Using”). Applicants’ representative respectfully requests that this rejection be withdrawn for at least the following reason. SNAP, WFT, and Using do not disclose each and every element of the subject claims.

A single prior art reference anticipates a patent claim if *each* and *every* limitation set forth in the patent claim is disclosed in the reference, either expressly or inherently.

(See *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 U.S.P.Q.2d 1597, 1599, 2 U.S.P.Q.2d 1051, 1052-53 (Fed. Cir. 2002) (citing to *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987))) (emphasis added). Moreover, “[t]he *identical* invention must be shown in as *complete* detail as is contained in the patent claim.” (*Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989) (emphasis added) (citing *Jamesbury Corp. v. Litton Industrial Products, Inc.*, 756 F.2d 1556, 1560, 225 U.S.P.Q. 253, 257 (Fed. Cir. 1985); and *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548, 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983))).

The present invention relates to systems and methods that facilitate software application development *via* a meta-model object and framework supporting meta-classes, meta-attributes, meta-relationships, rules and behavior. (See Specification pg. 1, ln. 5-8). In particular, the subject invention provides a meta-model object that enable software developers to describe attributes, relationships, and respective constraints for meta-data that simplifies program development and operating system interactions. (See Specification pg. 4, ln. 3-9). To this end, independent claim 1 (and similarly independent claims 22, 29, 35 and 36) recites: *a system stored on computer readable media, comprising: an input component that reads a meta-model to determine a structure of an item*. SNAP, WFT, and Using fail to disclose such claimed aspects of the subject invention.

WFT and Using relate to providing computer-based support for designing workflows in business processes. In particular, a WFT system provides predefined workflow system elements, an integrated development environment, and the tools for building a workflow system. (See WFT pg. 2-2, paragraph 1). As disclosed in WFT and Using, a workflow system is made up of applications and associated tasks and work items that flow throughout the system. (See WFT at p. 2-10). In addition, SNAP relates to a system that provides tools for building a SNAP application. (See SNAP at p. 2-2). However, SNAP, WFT and Using are silent with regard to *determining the structure of an item according to a meta-model or a meta-relationship*. The system as recited in the subject claims can determine the structure of an item according to a meta-model or a meta-relationship. Thus, the system as claimed can allow generic functions. For example, the system can allow generic functions such as undo/redo, and apply them

appropriately based on the structure of the item. SNAP, WFT and Using do not disclose this novel feature.

The Examiner contends that the class editor described in Using is an input component that reads a meta-model to determine a structure of an item as recited in independent claim 1 (and similarly independent claims 22, 29, 35 and 36). (See Final Office Action dated December 15, 2006, pg. 4). Applicants' representative respectfully disagrees with such contention. While the class editor as disclosed in Using can allow a user to edit attributes of a data class, the class editor does not read a meta-model to determine the structure of an item. As noted *supra*, the system recited in the subject claims can determine the structure of an item according to a meta-model or a meta-relationship. SNAP, WFT, and Using fail to disclose such novel aspect as claimed.

Moreover, with respect to independent claim 22, the Examiner asserts that the Object Model Editor as disclosed in Using is an analysis component that determines at runtime a structure of the item by reading the meta-model as recited in independent claim 22. (See Final Office Action dated December 15, 2006, pg. 4). Applicants' representative avers to the contrary. The Object Model Editor as disclosed in Using is a system that provides tools for designing the object model and creating and editing classes included in the workflow system. (See Using, pg. 1-3). However, Using's Object Model Editor does not describe a system that determines the structure of an item. Moreover, Using's Object Model Editor is silent with regard to a system that determines, at runtime, the structure of an item. Therefore, SNAP, WFT and Using do not disclose these novel features as recited in the subject claims.

In view of at least the foregoing, applicants' representative respectfully submits that Template Software, as described in the SNAP, WFT and Using, does not anticipate the subject claims. Accordingly, applicants' representative respectfully requests that this rejection be withdrawn.

### **III. Rejection of Claim 13 Under 35 U.S.C. §103(a)**

Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Template in view of MS Visual Basic. This rejection should be withdrawn for at least the following reason. Claim 13 depends from independent claim 1. Independent claim 1 is allowable for at least the

reasons stated above. Accordingly, it is respectfully requested that this rejection be withdrawn with respect to dependent claim 13.

#### **CONCLUSION**

The present application is believed to be in condition for allowance in view of the above amendments and comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP487US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

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